Idaho Department of Environmental Quality 1445 N. Orchard St. Boise, ID 83706

Re: Status update for Snake River fall Chinook salmon relative to Snake River salmonid spawning Site Specific Criteria proposal

Recent status updates on the Snake River fall Chinook salmon demonstrate that, as forecast, the 2011 returns were strong. Last season (fall 2011), the adult return of Snake River fall Chinook salmon upstream of Lower Granite Reservoir was the third highest in the last 20 years, with a total adult return of 27,720. This includes a total natural adult return of 8,097 which is the second highest natural adult return in the last 20 years (see Figure 1 and Table 1 below). These adult returns produced a high number of redds above Lower Granite Reservoir (4,686) of which 2,837 (60.5%) were constructed in the mainstem Snake River between Lower Granite Reservoir and Hells Canyon Dam. These redd numbers are the second highest count above Lower Granite and also in the Snake River to Hells Canyon since intensive redd counting surveys began in 1991.

A high number of jack Chinook salmon passed over Lower Granite Dam last fall. The strength of the jack return can be indicative of the size of the adult return to follow the next year. Early fall Chinook salmon return forecasts for fall of 2012 are comparable to the 2011 returns.

The 2012 forecast is slightly higher than the comparable 2011 forecast and slightly less than the comparable 2010 forecast. There is a strong likelihood that the Snake River adult returns will be comparable to the 2011 season during the fall of 2012, continuing to demonstrate strong returns. The 2012 returns are predicted to be the fourth highest returns since recordkeeping began in 1964.

Attached are the following exhibits that capture the current status of the Snake River fall Chinook:

- Figure 1 shows the adult return and redd counts for 2011.
- Table 1 shows adult and redd counts above Lower Granite Dam for the years 1990 through 2011.
- Table 2 is the 2012 forecast for Columbia River fall Chinook returns to the mouth of the Columbia River.
- A summary from the Washington Department of Fish and Wildlife (dated April 13, 2012) of the 2012 salmon season, including a table (dated February 15, 2012) with Columbia River fall Chinook 2012 preseason forecasts.

Enclosures

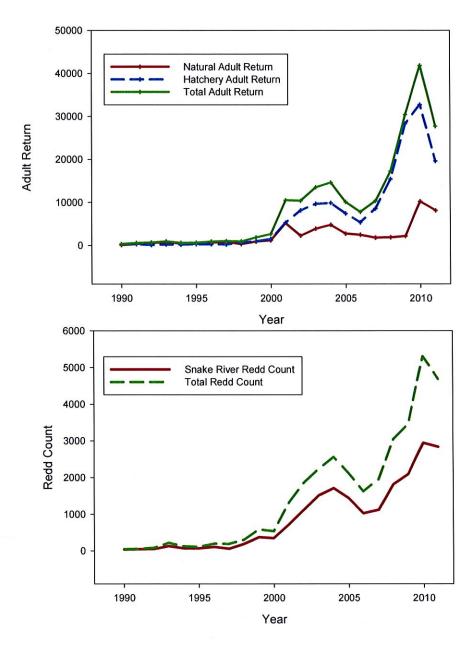


Figure 1. (upper) Fall Chinook salmon counts (total, hatchery and natural) above Lower Granite Dam between 1990 and 2011. (lower) Total redd count and Snake River redd counts between 1990 and 2011.

Table 1. Fall Chinook salmon counts above Lower Granite Dam and corresponding number of Snake River and total number of redds.

				Snake	
	Natural	Hatchery	Total	River	Total
Year	Adults	Adults	Adult	Redds	Redds
1990	78	258	336	37	45
1991	316	274	590	46	54
1992	549	119	668	47	82
1993	742	210	952	127	219
1994	406	201	607	67	120
1995	350	285	635	65	109
1996	639	280	919	104	197
1997	796	211	1007	58	189
1998	304	658	962	185	303
1999	905	957	1862	373	586
2000	1171	1497	2668	346	536
2001	5216	5291	10507	709	1302
2002	2235	8155	10390	1113	1854
2003	3856	9649	13505	1512	2241
2004	4756	9870	14626	1709	2562
2005	2704	7421	10125	1442	2127
2006	2433	5351	7784	1025	1627
2007	1762	8565	10327	1117	1951
2008	1853	15413	17266	1819	3055
2009	2126	28307	30433	2095	3464
2010	10187	32694	41813	2944	5306
2011	8097	19623	27720	2837	4686

Table 2. Forecast for Columbia River fall Chinook salmon returns to the mouth of the Columbia River (after ocean fisheries).

Columbia River Fall Chinook Returns

	<u>2012</u>	<u>2011</u>	<u>2010</u>
Stock	<u>Forecast</u>	<u>Forecast</u>	<u>Forecast</u>
LRH	119,700	109,000	128,600
LRW	16,200	15,200	13,100
ВРН	61,400	70,600	116,400
URB	353,300	322,200	399,600
MCB	90,800	87,200	100,300
SAB	6,600	16,400	8,300
Total	648,000	620,600	766,300

2012 forecast is after ocean fisheries

URB includes Snake River returns

Source: Washington Department of Fish and Wildlife, Oregon Department of Fish and Wildlife – Columbia River North of Falcon Meeting – Vancouver, WA (March 14, 2012).



State of Washington

DEPARTMENT OF FISH AND WILDLIFE

Summary of the 2012 North of Falcon / PFMC Salmon Season Setting Process

April 13, 2012

Following is a general itemization and overview of key issues presented to Washington Department of Fish and Wildlife (WDFW) fishery managers in 2012, during either the public process for setting salmon fishing seasons, or during government-to-government negotiations with the Northwest Indian Tribes.

Early Planning for the 2012 Process

WDFW met with Puget Sound and Coastal Washington Treaty Indian Tribes during the summer of 2011 to review success of the co-management process and to make recommendations for improvement. The 2011 season-setting process was considered less than successful due to challenges encountered in pursuing agreement on fishing plans and addressing our conservation objectives. For example, agreements about tribal and state managed fisheries in the Skokomish River and in Bellingham Bay were not reached until after the final week of negotiations. With this problem in mind, the tribes and WDFW pledged to engage early on any foreseeable, challenging issues for the 2012 process.

With this early planning strategy in mind, WDFW met with recreational constituents during the fall of 2011 to define potential changes to fisheries that included modification of mark-selective fisheries in the ocean, Puget Sound, and the Columbia River. Fishing priorities for the 2012 season were defined contingent upon forecasts of salmon abundance that would be available in late February. For example, working with our sport fishing advisory group, we developed a set of highest priority Puget Sound Chinook fisheries to be converted to mark-selective regulations, consistent with our Fish and Wildlife Commission's policy on Hatchery Reform and Selective Fisheries. Department staff analyzed those priority fisheries and prepared them for tribal review in January to ensure that the tribes had ample time to consider the technical merit and policy implications of those proposals.

2012 Forecasts

Forecasts for Columbia River, Washington Coastal and Puget Sound salmon stocks were available from tribal and state agencies in mid-February. Strong numbers of Columbia River Chinook indicated we could have a repeat of the excellent Chinook fisheries experienced in the ocean and the Columbia River in 2011. Coupling that strong forecast with a change to the fishery management plan for Lower Columbia River "tule" Chinook beginning with the 2012 season, and reduced fishing levels in Canada under the Pacific Salmon Treaty, larger Chinook quotas were considered by the Pacific Fishery Management Council in the ocean and longer sport seasons were considered for the River than those adopted for last year.

However, such low numbers of Columbia River hatchery coho are being forecast that ocean quotas cannot be expanded measurably from 2011 levels. Even with mark-selective fishing in the ocean for sport and troll fisheries, there is a real possibility that the impact of fishing on Lower Columbia River natural coho stocks could constrain access to the very abundant Chinook. We will be closely monitoring the ocean fishery to ensure that catch quotas are not exceeded and that regulations are adjusted if needed to ensure that our objectives for quality fishing opportunities are achieved.

Washington coastal wild and hatchery coho are forecast to be at record or near-record levels. The strong wild returns forecast for Willapa Bay, Grays Harbor and the north Washington coastal rivers will mean very good fishing opportunities for those inside fisheries this fall. A stronger forecast for Grays Harbor wild Chinook makes a sport fishing opportunity to keep Chinook a reality for the first time in several years.

Inside the Columbia River, sport fisheries focused on Chinook salmon, such as the Buoy 10 fishery and the sport fishery above Tongue Point, will be kept open through the peak of the Chinook return. That means the Buoy 10 fishery will be opened through Labor Day – Chinook fishing was prohibited after August 28 for this fishery last year. Discussions are continuing between the Columbia River tribes and the states of Washington and Oregon about a potential, limited mark-selective Chinook sport fishery above Tongue Point in mid-September following closure of the non-selective fishery. If approved, this would be the first mark-selective sport fishery targeting hatchery fall Chinook in the Columbia River.

Commercial fisheries in the lower river have also been agreed upon that target stronger runs, such as the healthy and abundant wild upriver bright Chinook, while avoiding the weaker natural "tule" runs. The major commercial opportunity is upstream of the Lewis River, protecting the listed natural runs that are returning to lower Columbia River tributaries. Given the very low forecast of hatchery coho, no mainstem commercial fisheries targeting this species are planned.

The status of Canada's Fraser River wild coho salmon has been critically low for more than a decade, with no recovery in sight. Our Pacific Salmon Treaty obligation is to limit our U.S. fisheries such that no more than 10% of the population is killed incidental to fishing for hatchery coho or Fraser sockeye. These wild Fraser (Thompson River) River coho are taken in very small numbers in fisheries throughout the northern, U.S.-Canada border areas of the ocean (treaty Indian troll), the Strait of Juan de Fuca (Sekiu sport), and Bellingham Bay (Indian and state commercial net). Forecasts for all Puget Sound coho are similar to recent levels and will meet conservation goals with fisheries similar to recent years.

Puget Sound Chinook forecasts for 2012 are significantly different with three stocks:

- 1) Green River wild and hatchery Chinook will return at very low levels even lower than the levels observed in 2010 and 2011;
- 2) Skagit River summer Chinook are forecast to return at much lower levels than previous years, with the Sauk River summer population predicted to be in a very low, or critical status posing a problem for the tribes in accessing the large number of sockeye expected to return to the Baker River; and,
- 3) Skykomish summer Chinook, both the wild and hatchery (Wallace River) stock components were expected to be in very low abundance the Wallace River hatchery egg-take goal is predicted to not be met.

Engaging the Negotiations - Puget Sound

We faced the usual constraints on fishing opportunity with ESA listed Puget Sound Chinook populations. The conservation objectives defined in our Harvest Management Plan, that is approved through the 2013 season, requires us to limit impacts on the usual list of "most constraining" wild stocks including the mid-Hood Canal rivers (Dosewalips, Duckabush, Hamma-Hamma), Nooksack springs, Stillaguamish, Snohomish, Dungeness, and Lake Washington stocks that are taken in small numbers in almost all our Puget Sound marine fisheries. Once all forecasts were available in early March, the tribes and WDFW are able to use the FRAM computer model to evaluate the impacts of our fishery proposals.

It was quite clear early in March that the mid-Hood Canal Chinook stock would present the greatest obstacle to moving forward with all our planned modifications to Puget Sound mark-selective fisheries. The conservation objective for mid-Hood Canal Chinook is to limit the impact in all tribal and state, ocean and Puget Sound fisheries to not more than 12%. The majority of that 12% limit has been associated with incidental mortality in sport fisheries. Even with mark-selective fishing regulations throughout most of Puget Sound, the minor impact of releasing wild Chinook has added up to a level exceeding 12% and has prevented expansion of

mark-selective fishing. With this limit in mind, WDFW presented specific new mark-selective fishing proposals to the tribes in January:

- 1) Convert winter-period (October April) non-selective Chinook sport fisheries to mark-selective regulations in Areas 6, 11 and 12. Assuming a reduction in the impact on wild fish with mark-selective fishing, we also proposed the seasons be extended for approximately one additional month in each area.
- 2) Start the mark-selective sport fishery in Area 9 two weeks early (July 1 compared to July 16). WDFW also proposed that the closed portion of Area 9 adjacent to the Hood Canal Bridge (south of Olele Point Foulweather Bluff line) be opened or that impacts on mid-Hood Canal Chinook be reduced due to the closure.

The Area 9 and Area 10 mark-selective fishery during July and August has been enormously successful in terms of providing quality fishing opportunity and catch of hatchery produced Chinook. Since this fishery was initially opened in 2007, participation in the fishery has grown to a total of 65,000 angler trips, with approximately two-thirds of that total in Area 9. Once the initial impacts of the proposed new mark-selective fisheries was analyzed and shared with the public and the tribes at North of Falcon meetings, we realized that the Area 9 proposal would need to be modified or other sport fisheries would need to be curtailed. The Area 9 fishery has a very high impact on the mid-Hood Canal stock. Following consultation with sport fishery advisors and others attending our public meetings, we modified our Area 9 proposal to opening on July 1, but requiring anglers to release all Chinook until the mark-selective fishery begins on July 16. The new opportunity for coho salmon starting July 1 in Area 9 matches the existing season in Area 10.

Concerns were expressed by tribal representatives to WDFW about the proposed winter mark-selective fisheries. The tribes expressed general support for the concept of using mark-selective fishing for conservation effects but not for the purpose of utilizing reduced impact levels as a justification for increasing fishing opportunity. The Skokomish Tribe objected to even analyzing the proposed Hood Canal Area 12 winter mark-selective fishery, citing a need to analyze the results of at least three years of fishing with the current regulations before additional selective fishing could be considered. The tribes simply did not support converting non-selective fishing to mark-selective in Area 11, but did not offer reasons for that objection. Regarding the Area 6 proposal, the tribes expressed a concern for the status of Dungeness River spring Chinook and the possible increase in impacts from increasing fishing during April (the proposal extended the fishery from April 10 to April 30).

Based on consultations with our sport fishery advisors and the public, we modified our proposals for these mark-selective fisheries to include:

- 1) For Area 6, an additional 2 ½ months of fishing December 1-February 15, and with no extension beyond April 10;
- 2) For Area 12, simply converting the non-selective fishery to mark-selective fishing from October through December; and,
- 3) Dropping the Area 11 proposal (leaving the fishery as non-selective).

These mark-selective fishery proposals were eventually agreed upon.

Mark-selective sport fisheries for hatchery coho in the ocean, the Strait of Juan de Fuca and the San Juan Islands have been used successfully to ensure we retain stable sport seasons and meet conservation objectives for Canadian and U.S. wild coho stocks. In recent years, late in the coho migration period, the presence of marked hatchery coho declines compared to wild coho. Many anglers have complained about mark-selective rules when marked fish comprise less than half or less than one-third of the fish encountered. Recent seasons structured for Area 5 have allowed a limited amount of time in the latter part of September for non-selective sport fishing, and the Sekiu/Clallam Bay community has enjoyed the economic benefits of the popularity of this fishery. For the 2012 season, WDFW expanded the use of non-selective seasons during September in Area 5 and during October in the San Juan Islands.

Other Challenging Management Situations Addressed by the Tribes and WDFW for 2012

The Nisqually River Chinook recovery plan defines stepped reductions to fishing levels and a reduction down to 56%, from 65% in 2011, is scheduled for 2012. The Nisqually Tribe's net fisheries for this season are undergoing a dramatic change that includes elimination of fishing days or weeks during the heart of the season and also includes testing of new tangle net gear that will select hatchery Chinook and release wild Chinook. The Nisqually Tribe should be applauded for their efforts to make such changes and for the investment in monitoring and sampling these fisheries to enable evaluation of these changes to ensure success in the next stepped reduction planned for the 2014 season.

The Puyallup Tribe continues to step up to the challenge of modifying their fisheries in the Puyallup River that must meet the conservation limit defined in our management plan that constrains all fisheries (including Canada and Alaska) to not more than a 50% total rate of impact on wild Chinook. The Tribe has limited their Chinook directed fishing to only one or two days in recent years. At the request of the Tribe, WDFW has closed sport fishing in a section of

the River on days opened to tribal drift gill-netting to minimize conflicts between tribal and sport fishers.

Management of the Skokomish River Chinook fisheries, tribal net and sport, has been made more difficult by the fact that both fisheries had much higher harvest rates in 2012 than planned. The sport fishery catch was about 50% higher and the tribal net fishery was nearly double the pre-season expected catch. WDFW and the Skokomish Tribe met early and often to reach agreement and avoid an impasse like we faced at the end of the 2011 North of Falcon process. The most difficult issue to resolve was finding confidence in the methods for predicting the outcome of season schedules, given the high angler effort in the mark-selective sport fishery, and without an understanding of the cause for high harvest rates in the tribal net fishery observed for the last two years. WDFW and the Tribe reached agreement during the last week of negotiations. Sport fishing in the River above the Highway 106 Bridge will be restricted to just 13 days in August and early September. The Tribe's net fishery was also reduced compared to the 2011 season schedule.

The continuing poor status of Green River Chinook predicted for 2012 caused the Muckleshoot and Suquamish tribes to cancel commercial fisheries directed at Chinook in Elliott Bay and the Green River. That decision contrasts with the 2011 agreement that allowed limited fishing if the results of a test fishery indicated sufficient numbers in the run to meet spawning goals. No such in-season management is planned for the 2012 season. As an additional conservation measure, WDFW agreed to close a portion of the upper Green River to trout and steelhead fishing during the period of peak Chinook spawning activity (mid-September through October).

Skagit River tribal net fisheries were adjusted downward from the 2011 season to meet our conservation objectives for Sauk River summer Chinook. The Swinomish and Upper Skagit tribes will open fisheries on the peak of the returning migration of sockeye (mid-June to mid-July). Sport fishing directed at the large return of sockeye (~40,000, similar to the 2011 run) will be opened for the first time from mid-June through mid-July. Anglers will be required to release Chinook caught incidental to sockeye fishing. WDFW will monitor this fishery to gather information about the success of anglers targeting sockeye and avoiding Chinook. The primary opportunity for sockeye will again be the Baker Lake fishery that will be opened more than two weeks earlier than the 2011 season. The popularity of this sockeye fishery was the focus of attention and concern at public meetings in the north Puget Sound area. One of the concerns was with the apparent unequal catch by tribal and sport fisheries last year. The sport fishery in Baker Lake caught 53% of the total run – a very high rate of harvest compared to other sockeye lake fisheries in Washington – and a total of over 8,600 sockeye. The tribes caught 9,600. The tribes also took 4,500 from the Baker River trap for ceremonial and subsistence uses, consistent with their share of the total number of harvestable fish. This is an evolving fishery, with all parties

pursing new fisheries and learning how to efficiently manage the system. It will take several years and lots of cooperation to work out the bugs.

WDFW and the Lummi Tribe met several times during March and April to address a number of fishery issues in the Bellingham Bay area adjacent to the Lummi Tribal reservation. Concerns for non-Indian trespassing on the reservation while engaged in sport or commercial salmon fishing, crabbing, and even duck hunting, have been expressed by the Lummi Tribe in recent negotiations during the annual North of Falcon process. Some of those activities are confirmed as being legitimate, and some are issues needing enforcement attention. As a result of our discussions, WDFW has agreed to restrict non-Indian salmon fishing inside Lummi Bay and to define an area closed to fishing or hunting adjacent to the Lummi Tribal reservation boundary inside Bellingham Bay. These restrictions will enable state enforcement of closed areas and, hopefully, will lead to more productive and cooperative management of fisheries in the region between WDFW and the Tribe.

Chum fisheries in Hood Canal and southern Puget Sound are extremely important to non-Indian commercial fisheries. The runs of wild and hatchery chum have been very strong in recent years and catches by gillnet and purse seine fisheries have exceeded 500,000 chum salmon per year. The tribes catch nearly all their share of South Sound chum in terminal areas (e.g., Elliott Bay, Puyallup and Nisqually rivers, and Area 13 - Squaxin tribal), while the Hood Canal tribes take their share mostly in marine waters of Hood Canal. The tribes have challenged the state's management of purse seine gear as being too powerful and taking too many fish too efficiently, possibly reducing effectiveness of the tribal fishery. The tribes have had no problem taking their share of the harvestable abundance however, and in 2011 took 40,000 more than the non-Indian netters. In our negotiations during the North of Falcon process for 2012, we agreed to close a small area around Seabeck (Hazel Point) to accommodate the tribes' concerns by providing for an exclusive tribal fishing area.

COLUMBIA RIVER FALL CHINOOK 2012 PRESEASON FORECASTS

	2012	2011	2011
	February	Actual	February
Stock Group	Forecasts	Returns	Forecasts
Lower River Hatchery - LRH	127,000	109,300	133,500
Lower River Wild - LRW	16,200	15,200	12,500
Bonneville Pool Hatchery - BPH	63,800	69,600	116,400
Upriver Bright - URB	353,500	325,100	398,200
Snake River Wild - SRW*	NA	14,900	17,500
Bonneville Upriver Bright - BUB	24,600	28,600	37,600
Pool Upriver Bright - PUB	66,200	56,300	62,400
Columbia River Total	651,300	604,100	760,600

^{*}Subset of URB

2012 Forecasts

- ❖ LRH About 40% greater than the 10-year average (91,700).
- ❖ LRW Similar to 10-year average (15,000).
- ♦ BPH About 40% less than the 10-year average (100,300). Similar to 2011 actual return.
- URB 4th largest return since record keeping began in 1964.
- ♦ BUB Similar to 2011 actual returns and about half of the 10-year average of 46,100.
- PUB About 1/3 greater than the 10-year average (46,100).
- Total forecast of 651,300 Columbia River fall Chinook is similar to the last two years' actual returns and greater than the 10-year average of 569,400.

February 15, 2012 Washington Department of Fish and Wildlife U.S. v Oregon Technical Advisory Committee Sub-group

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